

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Formel Industries, Inc.
Attn: Jim Zidek
2355 North 25th Avenue
Franklin Park, Illinois 60131

<u>Application No.:</u> 05030054	<u>I.D. No.:</u> 031096AMM
<u>Applicant's Designation:</u>	<u>Date Received:</u> March 14, 2005
<u>Subject:</u> Flexographic Packaging Printing Facility	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Location:</u> 2355 North 25th Avenue, Franklin Park	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of three flexographic printing presses controlled by catalytic afterburner pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 25 tons/year for volatile organic material (VOM), 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year for totaled HAPs). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
2. This permit is issued based upon the flexographic printing presses being subject to the VOM control requirements of 35 Ill. Adm. Code 218.401: Flexographic and Rotogravure Printing. The printing presses shall be equipped with a capture system and control device that provides an overall reduction in VOM emissions of at least 60 percent and a control device reduces the captured VOM emissions by at least 90 percent by weight (35 Ill. Adm. Code 218.401(c)).
3. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program Permit (CAAPP) permit.

4. VOM emissions from flexographic printing presses operations shall not exceed 2.0 ton/months and 16.0 tons/year.

The VOM and HAP emissions shall be determined from the following equation:

$$E = [\Sigma(M_i \times C_i) - W \times C_w] \times (1 - CE)]/2,000, \text{ where:}$$

E - VOM/HAP emissions (tons);

M_i - VOM/HAP-containing raw material usage (gal);

C_i - VOM/HAP content of the raw material (lb/gal);

W - certified amount of waste shipped-off (gal);

C_w - certified VOM/HAP content of the waste (lb/gal);

CE - overall control efficiency of the capture system and control device demonstrated during the most recent stack test.

Value of C_w for the current reporting period shall be used from the most recent waste shipment. Upon receiving updated C_w for the reporting period emissions shall be recalculated.

HAP emission and HAP content of the waste may be assumed proportional to the HAP fraction of total VOM used during the corresponding period.

Compliance with annual limits shall be determined from a running total of 12 months of data.

- 5a. The catalytic afterburner controlling three flexographic printing presses shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.
- b. The catalytic afterburner shall be equipped with Illinois EPA and USEPA approved continuous monitor that measures the temperature rise across each catalytic afterburner bed. It shall be installed, calibrated, maintained, and operated in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the afterburner is operating.
- c. Monitoring device shall be equipped with a continuous recorder of the temperature, such as a strip chart recorder or computer, with at least the same accuracy as the temperature monitor. It shall be installed, calibrated, operated and maintained, in accordance with manufacturer's specifications.
6. Operation and emissions of the natural gas combustion equipment shall not exceed the following limits:

Natural Gas Usage: 10 mmscf/mo, 80 mmscf/yr

<u>Pollutant</u>	<u>Emission Factor</u> (lb/mm scf)	<u>Emissions</u>	
		(Ton/Mo)	(Ton/Yr)
Nitrogen Oxides (NO _x)	100	0.5	4.0
Carbon Monoxide (CO)	84	0.4	3.4
Particulate Matter (PM)	7.6	0.04	0.3
Volatile Organic Materials (VOM)	5.5	0.03	0.2

These limits are based on the maximum operating rate and standard emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

7. The Permittee shall maintain daily records of the following items required by 35 Ill. Adm. Code 218.404(e) (2):
 - i. Afterburner combustion chamber monitoring data;
 - ii. A log of operating time for the capture system, afterburner, monitoring device, and the associated emission unit(s); and
 - iii. A maintenance log for the capture system, afterburner, and monitoring device detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- 8a. The Permittee shall maintain monthly records of the following items:
 - i. Amount of each VOM/HAP containing material used in the printing and clean-up operations (gal/mo, gal/yr);
 - ii. VOM and HAP content of each VOM/HAP containing material used in printing and clean-up operations (weight percent);
 - iii. Certified amount of waste shipped-off (gal/mo, gal/yr) and its VOM content (lb/gal);
 - iv. Natural gas usage (mm scf/mo, mm scf/yr); and
 - v. Emission calculations (ton/mo, ton/yr).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
9. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

10. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

Please note that your request to incorporate the rotogravure printing press described in Construction Permit 04060036 cannot be satisfied until the equipment has been constructed in accordance with applicable conditions in this construction permit.

If you have any questions on this, please call Valeriy Brodsky at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:VBJ:
cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the packaging printing facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, e.g., 25 tons/year for volatile organic material (VOM), 10 tons per year for a single HAP, and 25 tons per year for totaled HAP at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

Emissions (tons/yr)						
Process	VOM	NO _x	CO	PM	Single HAP	Total HAP
Printing Operations	16.0				<10	<25
Combustion Equipment	0.2	4.0	3.4	0.3		

VJB: